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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,432	02/12/2004	Dae-Gyun Kim	678-1351 (P11718)	4336

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EXAMINER

HERRERA, DIEGO D

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/777,432	Applicant(s) KIM ET AL.	
	Examiner Diego Herrera	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Response to Amendment

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The examiner accepts the abstract of the disclosure with the amendments made to satisfy MPEP § 608.01(b).

Examiner accepts the changes made on Page 6, line 29, of the specification the word 'caninclude'.

Claim Objections

Examiner accepts claims 9 & 10 with the changes made therein.

Response to Arguments

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

Art Unit: 2617

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable by Barany et al. (U.S. Patent Application Publication # 2002/0034166 A1), in view of Dailey (US PATENT 6564049 B1).

1. Regarding claim 1, Barany et al. shows and discloses a method for performing call set up by a mobile station in a mobile communication system having a base station for serving the mobile station, (Paragraph [0003] & [0022] & [0061], where the mentioned paragraphs contain the information of a mobile station interacting with a base station in a RNC for controlling said base station), the method comprising the steps of:
 - a. Transmitting to the base station an origination message that does not contain a recipient's phone number (Fig. 3; Paragraph [0029], Paragraph [0062], RACH proxy message is used to set up a call without information containing a recipient's phone number);
 - b. Upon receiving a channel assignment message from the base station, setting up wireless channels to the base station according to assignment information included in the channel assignment message (Fig. 3, objects 202 and 204 are applied and understood by the examiner to apply to receiving a channel assignment message from the base station); and
 - c. Upon completion of entry of the recipient's phone number, transmitting to the base station an origination continuation message containing the recipient's phone number (Fig. 3, object 206 is applied and understood by the examiner to apply to transmitting to the base station an origination continuation message containing the recipient's phone number; Paragraph [0063]).

However, Barany et al. does not disclose a mobile switching center for controlling the base station, nonetheless, Dailey discusses method for call set up with call groups involving a mobile switching center for controlling multiple base stations (abstract, title, fig. 6-8, col. 4 lines: 46-60).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to modify the invention of Barany et al. to specifically include a mobile switching center for controlling a base station as taught by Dailey for the purpose of reducing call set up time (col. 5 lines: 43-45).

2. Regarding claim 4, Barany et al. discloses and shows a method for performing call setup by a base station upon a call attempt by a mobile station in a mobile communication system having the base station for serving the mobile station, and a mobile switching center for controlling the base station (Paragraph [0003] & [0022] & [0061], where the mentioned paragraphs contain the information of a mobile station interacting with a base station in a RNC for controlling said base station), the method comprising the steps of:
 - a. Upon receiving an origination message that does not contain a recipient's phone number from the mobile station, assigning to the mobile station wireless resources and transmitting to the mobile station a channel assignment message containing the assignment information (Fig. 3; Paragraph [0029], Paragraph [0062], RACH proxy message is used to set up a call without information containing a recipient's phone number.

Objects 202 and 204 are applied and understood by the examiner to apply to receiving a channel assignment message from the base station);

- b. After transmitting the channel assignment message, assigning wireless channels to the mobile station (Fig. 3, object 204 shows that the assignment of logical channels and physical channels are assign as shown in object 206 as the mobile invites and object 208 responds to the invite by 'ringing' message);
- c. After completion of the assignment of the wireless channels, transmitting to the mobile switching center a service request message if an origination continuation message containing a recipient's phone number is received from the mobile station (Paragraph [0063], note: The base station after sending the assignment of the communication channels to the mobile station, the base station then communicates with the SGSN which is connected to the MSC but not directly. Fig. 1, object 12; Paragraph [0024]); and
- d. Upon receiving an assignment request message from the mobile switching center, transmitting an assignment complete message to the mobile switching center (Fig. 1; Paragraph [0064], note: The examiners understands that the assignment completion message to the BSC is transmitted when connection to the intended receiver is being contacted).

However, Barany et al. does not disclose a mobile switching center for controlling the base station directly, nonetheless, Dailey discusses method for

call set up with call groups involving a mobile switching center for controlling multiple base stations directly (abstract, title, fig. 6-8, col. 4 lines: 46-60).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to modify the invention of Barany et al. to specifically include a mobile switching center for controlling a base station directly as taught by Dailey for the purpose of reducing call set up time (col. 5 lines: 43-45).

3. Regarding claim 6, Barany et al. shows and discloses a method for performing call setup by a base station upon a call attempt by a mobile station in a mobile communication system having the base station for serving the mobile station, and a mobile switching center for controlling the base station (Paragraph [0003] & [0022] & [0061], where the mentioned paragraphs contain the information of a mobile station interacting with a base station in a RNC for controlling said base station), the method comprising the steps of:
 - a. Upon receiving an origination message from the mobile station, transmitting to the BSC a service request message, simultaneously assigning wireless resources to the mobile station, and transmitting a channel assignment message containing the assignment information to the mobile station (Fig. 7A; Paragraphs: [0024], [0011], [0070], [0062] & [0063], RACH proxy message is used to set up a call without information containing a recipient's phone number. Objects 202 and 204 are applied and understood by the examiner to apply to receiving a channel

assignment message from the base station. Objects 602, 604, and 606 are applied and understood by the examiner to apply to the transmitting of a channel assignment message containing the assignment information to the mobile station, where Barany says SGSN is part of MSC, and all signaling is between the entities, but further explained below taught by Dailey);

- b. Transmitting an assignment complete message to the BSC if an assignment request message is received from the mobile switching center (Fig. 3, Paragraphs: [0067] & [0070]; note: Object 212 is applied and understood by the examiner to apply to assignment complete message to the BSC, not the MSC which is addressed below).

However, Barany et al. does not disclose a mobile switching center for controlling the base station directly, nonetheless, Dailey discusses method for call set up with call groups involving a mobile switching center for controlling multiple base stations directly (abstract, title, fig. 6-8, col. 4 lines: 46-60).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to modify the invention of Barany et al. to specifically include a mobile switching center for controlling a base station directly as taught by Dailey for the purpose of reducing call set up time (col. 5 lines: 43-45).

4. Regarding claim 9, Barany et al. a method for performing call set up by a base station upon call attempt by a mobile station in a mobile communication system

having the base station for serving the mobile station, and a mobile switching center for controlling the base station (Paragraph [0024] & [0003] & [0022] & [0061], where the mentioned paragraphs contain the information of a mobile station interacting with a base station in a RNC for controlling said base station), the method comprising the steps of:

- a. Upon receiving an origination message that does not contain a recipient's phone number from the mobile station, transmitting a service request message to the mobile switching center, simultaneously assigning wireless resources to the mobile station, and transmitting a channel assignment message including the assignment information to the mobile station (Fig. 3; Paragraph [0029], [0024], [0070], [0062], RACH proxy message is used to set up a call without information containing a recipient's phone number. Were Barany shows SGSN is part of MSC, and signaling takes place between the entities. Fig. 3, objects 202 and 204 are applied and understood by the examiner to receiving a channel assignment message from the base station);
- b. After transmitting the channel assignment message, assigning wireless channels to the mobile station (Fig. 3, object 204 shows that the assignment of logical channels and physical channels are assign as shown in object 206 as the mobile invites and object 208 responds to the invite by 'ringing' message);

- c. After assignment of the wireless channels, transmitting to the mobile switching center a recipient's phone number if an origination continuation message is received from the mobile station (Paragraph [0063], note: The base station after sending the assignment of the communication channels to the mobile station, the base station then communicates with the SGSN which is connected to the BSC. Fig. 1, object 12; Paragraph [0024]); and
- d. After assignment of the wireless channels, if an assignment request message is received from the mobile switching center in response to a service request message, transmitting to the mobile switching center an assignment complete message (Fig. 1; Paragraph [0064], note: The examiners understands that the assignment completion message to the BSC is transmitted when connection to the intended receiver is being contacted).

However, Barany et al. does not disclose a mobile switching center for controlling the base station directly, nonetheless, Dailey discusses method for call set up with call groups involving a mobile switching center for controlling multiple base stations directly (abstract, title, fig. 6-8, col. 4 lines: 46-60).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to modify the invention of Barany et al. to specifically include a mobile switching center for controlling a base station directly as taught by Dailey for the purpose of reducing call set up time (col. 5 lines: 43-45).

5. Regarding claim 10, Barany et al. shows and discloses a mobile station apparatus for performing call setup in a mobile communication system (Paragraph [0003] & [0022] & [0061], where the mentioned paragraphs contain the information of a mobile station interacting with a base station in a RNC for controlling said base station), comprising:
- a. A key input unit for generating a key signal corresponding to a key input by a user (Fig. 8, note: The Mobile Station at the lower right corner of the right up most box includes a keyboard, hence it has keys to input information by the user);
 - b. A radio frequency (RF) unit for up-converting a signal to be transmitted to a base station into a RF signal, and down-converting an RF signal received from the base station into a base band signal (Fig. 8, note: Object 764 is a transceiver that generates and receives RF signals from base station);
 - c. An inherent modem for encoding and modulating data or a message to be transmitted to the base station, providing the modulated data or message to the RF unit, and demodulating and decoding the base band signal received from the RF unit (Fig. 8, Paragraph [0022], Were Barany shows a mobile data unit so therefore having a modem. note: Object 776 is understood by examiner to encode and modulate data and decode and demodulate data); and

- d. A controller for generating an origination message that does not contain a recipient's phone number and providing the origination message to the modem when a dial signal is received from the key input unit, controlling the RF unit to setup wireless channels and performing service negotiation upon receiving a channel assignment message, and generating an origination continuation message to the modem when a key input complete signal is received from the key input unit (Fig. 8, note: Object 766 is a control unit that does provide origination message, key inputs, RF controlling, service negotiations, and origination continuation message when input is complete as mentioned above).

However, Barany et al. does not disclose a mobile switching center for controlling the base station directly, nonetheless, Dailey discusses method for call set up with call groups involving a mobile switching center for controlling multiple base stations directly (abstract, title, fig. 6-8, col. 4 lines: 46-60).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to modify the invention of Barany et al. to specifically include a mobile switching center for controlling a base station directly as taught by Dailey for the purpose of reducing call set up time (col. 5 lines: 43-45).

6. Consider claim 2, and as applied to claim 1 above, the combination Barany et al. and Dailey discloses and shows wherein the step of setting up wireless channels comprises the steps of:

- a. Assigning a forward traffic channel and a reverse traffic channel corresponding thereto according to the assignment information, and transmitting a preamble over the assigned reverse traffic channel (Barany-Paragraph [0033], SIP is able to communicate with a forward traffic channel and a reverse traffic channel as known in the art); and
 - b. Exchanging acknowledgement (ACK) orders with the base station and performing service negotiation with the base station (Barany-Fig. 3, object 212 is communicating from the mobile station to the base station in the RNC sending an ACK orders with the base station and performing service negotiations, Paragraph [0064]).
7. Consider claim 5, and as applied to claim 4 above, the combination Barany et al. and Dailey further comprising the steps of:
- a. Upon receiving the assignment request message from the mobile switching center, determining whether assignment of the wireless channels is completed (Barany-Fig. 3, note: Object 212 shows an ACK that is applied and understood by the examiner as the completion of the wireless channel assignment); and
 - b. Transmitting the assignment complete message to the mobile switching center if assignment of the wireless channels is completed (Barany-Paragraphs [0069]-[0071], note: paragraphs refer to Figs. 7A-7C, which describe connections between the mobile station and RNC; where the

ACK of connection or set up of wireless channels is completed and other formalities that take place when establishing a connection).

8. Consider claim 7, and as applied to claim 6 above, the combination Barany et al. and Dailey shows and discloses the assignment request message from the mobile switching center is received after a service request message is transmitted (Barany-Paragraphs [0069]-[0071], note: paragraphs refer to Figs. 7A-7C, which describe connections between the mobile station and RNC; where the ACK of connection or set up of wireless channels is completed and other formalities that take place when establishing a connection).
9. Consider claim 8, and as applied to claim 6 above, the combination Barany et al. and Dailey shows and discloses further comprising the steps of:
 - a. Upon receiving the assignment request message from the mobile switching center, determining by the base station whether assignment of the wireless channels is completed (Barany-Fig. 3, Paragraph [0067]; note: Object 212 is applied and understood by the examiner to apply to assignment complete message to the mobile switching center); and
 - b. Transmitting the assignment complete message to the mobile switching center if assignment of the wireless channels is completed (Barany-Paragraphs [0069]-[0071], note: paragraphs refer to Figs. 7A-7C, which describe connections between the mobile station and RNC; where the ACK of connection or set up of wireless channels is completed and other formalities that take place when establishing a connection).

Claims 3, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barany et al. (U.S. Patent Application Publication # 2002/0034166 A1), in view of Dailey, and further in view of Kasavaraju (U.S. Patent # 5,940,515).

10. Consider claim 3, and as applied to claim 1 above, Barany et al. and Dailey shows and discloses the origination message, however, Barany et al. and Dailey does not show and discloses a dummy phone number consisting of all '0s'.
11. Nonetheless, Kasavaraju shows and discloses a dummy phone number consisting of all '0s' (Fig. 3, col. 4, lines: 43-56, note: The examiner understands that the FIELDS is set to zero and is used to send an origination message consisting of dummy information to base station to initiate fast call set up, then after the real number is dialed by user and confirmation of originate continuation message does the base station proceed with the usual procedures which is the intention of this application to accomplish).
12. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Barany et al. and Dailey to specifically include dummy phone number consisting of all '0s' in the origination message as taught by Kasavaraju for the purpose of allowing a calling party to initiate a telephonic communication without divulging the dialed number to a possible intruder (col. 4, lines: 66-67, col. 5, line: 1).
13. Consider claim 11, and as applied to claim 10 above, is rejected under the same reasons as claim 3 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art is considered pertinent to applicant's disclosure:

- Belcea (U.S. Patent Application Publication # 2002/0089945 A1), "Time division protocol, for an AD-HOC, peer-to-peer radio network having coordinating channel access to shared parallel data channels with separate reservation channel".
- Simonsson et al. (U.S. Patent Application Publication # 2001/0041537 A1), "Method and apparatus relating to radio communication".
- Young (U.S. Patent # 6,058,180), "Automatic person-following communication system".
- Fehnel (U.S. Patent # 6,064,889), "Control channel management in cellular communications system".
- Chinitz et al. (U.S. Patent # 6,115,388), "Establishment of multiple low-rate inbound signaling links in CDMA dispatch system".
- Dailey (U.S. Patent # 6,564,049 B1), "Methods and systems for providing group calls with reduced setup times".
- Griffith et al. (U.S. Patent # 5,812,953), "Radio cellular telephone for remotely initiating operation".
- Norman et al. (U.S. Patent # 5,485,505), "Apparatus and method for remotely initiating operation of a cellular telephone".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday - Friday, 7 AM- 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G. Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D.H.



NICK CORSARO
PRIMARY EXAMINER